

of which he recommends a teaspoonful two or three times a day, with any liquid.—*Ibid.*

13. *On Opium in Tetanus, and some other Spasmodic Diseases.* By G. G. SIGMOND, M. D.—In tetanus, opium has been administered in enormous doses, and it is generally acknowledged that more benefit has been the result of this than of any other remedy. In this disease opium has been given to the amount of a scruple every hour, and a drachm as a night dose; and there has been found in the stomach, upon examination after death, sufficient to have killed the patient if he had recovered from the disease. In an early volume of the *Medical and Physical Journal* Mr. Cole relates a successfully treated case of tetanus, in which he gave thirty grains of pure opium, which is equivalent to 600 drops of pure laudanum, in twenty-four hours. Mursinne, of Berlin, has treated this subject very well; he prefers giving the drug in small doses, placing his patient in a warm bath, which evidently increases the activity of the opiate, which he prefers employing in the liquid form, at repeated intervals, giving larger doses gradually. Mr. Jenkinson, of the *Manchester Infirmary*, Mr. Boutflower, of Salford, and Mr. Ward, Surgeon to the *Manchester Infirmary*, wrote very ably some time since on opiate frictions in tetanus; with this remedy they had been eminently successful. Mr. Ward's observations on the effects of opium, applied internally, are remarkably practical and judicious. In the early volumes of the periodical to which I have alluded, you will find a series of very useful dissertations by Mr. Ward, on the *modus operandi* of opium; they occupied a great deal of attention at the time they were published: the subject is, as I have elsewhere observed, very interesting, but very difficult of solution. Dupuytren has taught us to give, with decidedly good effect, opium in that species of delirium traumaticum which is so closely allied to delirium tremens, and which often follows very violent injuries. If the opium be suddenly discontinued, a relapse of the delirium, accompanied with most extraordinary depression, is the result. I must refer you to a very interesting case, under the judicious management of Mr. Cæsar Hawkins, at *St. George's Hospital*, where, from fracture of the neck of the thigh-bone, delirium traumaticum occurred; it is narrated in the *Medico-Chirurgical Review* for February, 1829, and is well worthy your attentive perusal. In the greater number of the diseases which are classed under the head of spasmi, opium is very serviceable, but the effects are transitory, seldom terminating in cure; it is, therefore, employed only as a palliative. Thus, in chorea it affords temporary relief, but as more active remedial agents are known to us it is rarely employed. Opiate frictions in spasmodic diseases are frequently of most decided use; a drachm of finely powdered opium with a pound of axunge, or half an ounce of tincture of opium with the yolk of an egg, or with two drachms of oil, or with soap liniment, will be found most serviceable.

In Duncan's *Annals of Medicine* will be found a translation of Dr. Chiarige's practice in tetanus, in hydrophobia, in epilepsy, and likewise in paroxysms of the most furious mania, and in diabetes. Many cases are recorded of similar success by many British practitioners in various of these diseases. Opium, in true spasmodic colic, is a judicious remedy. Where this disease, however, is combined with inflammation, it is hurtful. A few drops of laudanum (from fifteen to thirty) in castor oil, in the earlier stage, will act as a charm; and also in that sudden and excruciating colic which results from the taking of cold drinks, or ice, whilst the system is heated; and in this case a large dose is absolutely necessary.—*Ibid.*

14. *On Opium in Epilepsy.* By G. G. SIGMOND, M. D.—In epilepsy, where no plethora exists, and where pain occurs, opium may prove serviceable; still we have not many cases on record which have been thus cured. Dr. Darwin tells us, that in two cases in which it occurred during sleep, a grain of the drug given at bed-time for some months removed the disease. De Haen relates, also, a case in which epilepsy, occurring during the night in a boy of six years of age, was cured by commencing with small doses, and gradually increasing it. Duchesne called opium a specific, but it has not obtained that character generally; indeed, it has been rather the subject of theoretical reasoning in this complaint than of practical experiment. Its external application has been of service. Portal attended a young lady who was daily attacked by very severe epileptic fits; they

commenced in one of her toes, and he entertained an idea of cutting the nerve, with a view of interrupting the communication; but he determined previously to try the application of opium, and he succeeded in effecting a complete cure.—*Ibid.*

15. *On Opium in Diabetes.* By G. G. SIGMOND, M. D.—In that singular disease, diabetes, where the functions of the kidneys seem completely changed, and where the solids seem decomposed, and a morbid secretion is formed, Dr. Rollo's plan of animal diet is not always to be carried into effect, from various causes, and in such cases opium and cinchona are most serviceable, and they generally, too, assist where the patient can be confined to animal diet. This singular, and sometimes obstinate disease, has yielded to the administration of opium, long persevered in.—*Ibid.*

16. *On Opium in lues Venerea.* By G. G. SIGMOND, M. D.—Opium is of very considerable service in combination with the different preparations of mercury in the cure of lues venerea; it has, certainly, no specific effect, nor is there any additional efficiency given to the mercury, but it has the power of diminishing the sensibility of the stomach and bowels, and it prevents many of those inconveniences which are apt to attend upon the administration of mercury, and it also facilitates the introduction of the mineral into the system. It removes likewise the morbid irritability often produced by mercury, and is useful where venereal sores are painful, and seem disposed to spread. Opium, as John Pearson has observed, may rather be said to assist the constitution of the patient than to communicate any additional virtue to the mineral specific; and hence he will be better enabled to bear the quantity that may be necessary to effect the cure. The good effects of mercury are sometimes lost by the supervention of diarrhœa, of vomiting, or of dysentery; but opium has the power of correcting those morbid changes.—*Ibid.*

17. *On Opium in Maniacal Affections.* By G. G. SIGMOND, M. D.—In maniacal affections, and in melancholia, opium has been given by some practitioners in very large doses, and occasionally with good effect; it must, however, be considered as rather a doubtful remedy. Bernard Heute first gave a very favourable account of the effects of opium in large doses; it is to be found in Wepfer's *Historia Apoplecticorum*. Dr. Ferriar was induced to try it, and gave in one case a quantity of an anodyne solution equal to sixteen grains of solid opium, in the day; the patient was not benefitted. He tried it in other cases, with similar results; in combination, however, with bark and aromatics, where the appearances resembled those of the low delirium in fevers, he was eminently successful. Pinel greatly approves of Dr. Ferriar's method of combining the use of bark and opium in cases of melancholia with great atony and depression, as well as in accidental idiotism consequent upon a too active treatment of mania. Dr. Laughter, physician to the Lunatic Asylum at Vienna, who tried many remedies, administers opium at bed-time as a soporific, and seems to think the general health much improved by its use.—*Ibid.*

18. *Opium in diseases of the Urinary Organs.* By G. G. SIGMOND, M. D.—Probably no part of the human system is more alive to painful sensations than the organs which are subservient to the urinary secretion, and to the faculty of generation. Although the kidneys are not endowed with very acute sensibility, the assistant organs and tissues have an extraordinary degree of feeling, and they likewise sympathise with other organs and tissues. Opium, in the various states of disease to which these parts are liable, is of inestimable value, for it is very quickly conveyed to them, and very speedily communicates to them its anodyne virtues. Physiologists looked to the channel by which fluids are rapidly carried to the kidneys, with the same anxiety and ardour, and the same disappointment, that in our days navigators have looked for the north-west passage; but it is now ascertained that the blood is transmitted to these organs in a very short space of time, and that not less than one-eighth of the whole mass is directed to them. Richerand observes, that 1000 ounces of blood pass through the renal tissue in an hour. Supposing that this fluid contains only one-tenth of the materials fit for supplying urine, a hundred ounces, or seven pounds and a quarter, might be